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PATENT

Attorney Docket No. 05569.0006.PCUS00

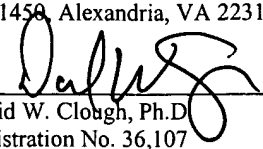
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Julia E. Thompson, *et al.*  
App. No.: 10/018,452  
Conf. No.: 4408  
Filing Date: October 25, 2002  
Title: SPECIFIC BINDING ANTIBODIES  
AND ANTIBODY FRAGMENTS  
FOR TGF $\beta$ <sub>1</sub>  
Art Unit: 1641  
Examiner: Not yet assigned.

CERTIFICATE OF MAILING

I hereby certify that this paper is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this date:

04/20/05  
Date

  
David W. Clough, Ph.D.  
Registration No. 36,107

**INFORMATION DISCLOSURE STATEMENT  
PURSUANT TO 37 C.F.R. §§ 1.56, 1.97 and 1.98**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In compliance with 37 C.F.R. § 1.97 and the continuing duty of disclosure under 37 C.F.R. § 1.56, Applicants call to the attention of the Examiner the references listed on the attached Forms PTO/SB/08A and PTO/SB/08B. It is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO/SB/08A and PTO/SB/08B be considered by the Examiner and made of record.

In accordance with 37 C.F.R. § 1.97(g), this Information Disclosure Statement is not to be construed as a representation that a search has been made. In accordance with 37 C.F.R. § 1.97(h), this Information Disclosure Statement is not to be construed as an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

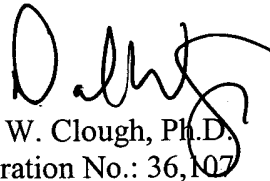
In accordance with 37 C.F.R. § 1.97(e)(1), Applicant hereby certifies that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the present statement, as evidenced by the date of the enclosed search report.

No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any additional fees under 37 C.F.R. §§1.16 to 1.21 be deemed necessary for any reasons relating to this document, the Commissioner is hereby authorized to deduct the fees from Howrey Simon Arnold & White, LLP Deposit Account 08-3038 referencing docket number 05569.0006.PCUS00.

Respectfully submitted,

HOWREY SIMON ARNOLD & WHITE, LLP

By:



David W. Clough, Ph.D.  
Registration No.: 36,107  
Customer No.: 22930

April 20, 2005  
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Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 5

## Complete if Known

Application Number	10/018,452
Filing Date	October 25, 2002
First Named Inventor	Julia E. Thompson, et al.
Group Art Unit	1641
Examiner Name	To be assigned
Attorney Docket Number	05569.0006.PCUS00

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	5,262,319	11/16/1993	Iwata et al.	
	A2	5,824,297	10/20/1998	Iwata et al.	
	A3	5,871,724	2/16/1999	Iwata et al.	

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
	B1	WO 97/13844	04-17-1997	Julia E. Thompson et al.		
	B2	GB 2 305 921	04-23-1997	Julia E. Thompson et al.		
	B3	WO 92/00330	01-09-1992	Kenneth K. Iwata et al.		
	B4	JP 06165692 (Abstract)	06-14-1994	Umeda Makoto, et al.		
	B5	JP 06165692 A (Abstract)	06-14-1994	Umeda Makoto, et al.		

Examiner Signature		Date Considered	
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Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				<b>Application Number</b>	10/018,452
				<b>Filing Date</b>	October 25, 2002
				<b>First Named Inventor</b>	Julia E. Thompson, et al.
				<b>Group Art Unit</b>	1641
				<b>Examiner Name</b>	To be assigned
<b>Sheet</b>	2	<b>of</b>	5	<b>Attorney Docket Number</b>	05569.0006.PCUS00

<b>OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS</b>			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T <sup>2</sup>
	C1	Supplemental Search Report of Corresponding European Application No. 04014972.6, dated December 12, 2004	
	C2	Burmester, James K., et al., "Mutational Analysis of a Transforming Growth Factor- $\beta$ Receptor Binding Site," <i>Growth Factors</i> , Harwood Academic Publishers, Vol. 15, No. 3, 1998, pp. 231-242.	
	C3	Flanders, Kathleen, C., et al., "Antibodies to Peptide Determinants in Transforming Growth Factor $\beta$ and Their Applications," <i>Biochemistry</i> , American Chemical Society, 1988, Vol. 27, 739-746.	
	C4	Hoefer, Magdalene, et al., "Anti-Transforming Growth Factor $\beta$ ) Antibodies With Predefined Specificity Inhibit Metastasis of Highly Tumorigenic Human Xenotransplants in nu/nu Mice," <i>Cancer Immunology and Immunotherapy</i> , Vol. 41, No. 5, 1995, 302-308.	
	C5	Su Wen Qian, et al., "Binding Affinity of Transforming Growth Factor-Beta for its Type II Receptor is Determined by the C-Terminal Region of the Molecule," <i>Journal of Biological Chemistry</i> , American Society of Biological Chemists, Vol. 271, No. 48, 29 November 1996, 30656-30662.	
	C6	R&D Systems Inc. Catalog, "Monoclonal Anti-human TGF- $\beta$ 1 Antibody", Catalog No. MAG240, June 20, 2000, pp. 1-2	
	C7	Oncogene Research Products, "Transforming Growth Factor $\beta$ 1 (Ab-1) Monoclonal Antibody, Catalog No. GF33L.	
	C8	R&D Systems, Inc. Catalog, Monoclonal Anti-human TGF- $\beta$ 1 Antibody", Catalog No. MAB2401, January 30, 2002, pp. 1-2	
	C9	R&D Systems, Inc. Catalog, Monoclonal Anti-TGF- $\beta$ 2 Antibody", Catalog No. MAB612, June 28, 2001, pp. 1-2	
	C10	R&D Systems, Inc. Catalog, Monoclonal Anti-TGF- $\beta$ 3 Antibody", Catalog No. MAB243, November 15, 2000, pp. 1-2	

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				<b>Examiner Name</b>	To be assigned
<b>Sheet</b>	3	<b>of</b>	5	<b>Attorney Docket Number</b>	05569.0006.PCUS00

	C11	R&D Systems, Inc. Catalog, Monoclonal Anti-TGF- $\beta$ Antibody", Catalog No. MAB643, June 21, 2001, pp. 1-2	
	C12	Data Specification Sheet – Chemicon International, Catalog No. MAB1032, "Mouse Anti-Human Transforming Growth Factor $\beta$ (TGF $\beta$ ) Monoclonal Antibody."	
	C13	Yes Biotech Laboratories, Ltd. Website homepage – <a href="http://www.yesbiotech.com/index.html">http://www.yesbiotech.com/index.html</a>	
	C14	Monoclonal Antibodies: Murine Anti-Human TGF $\beta$ data sheet – Thursday, February 7, 2002, Yes Biotech Laboratories Ltd. Website: <a href="http://www.yesbiotech.com/tech14.htm">http://www.yesbiotech.com/tech14.htm</a>	
	C15	RDI – Research Diagnostics, Inc. Website homepage – Thursday, February 7, 2002; Quick Access to Links for On Line Spec Sheets – <a href="http://www.researchd.com/index.htm">http://www.researchd.com/index.htm</a>	
	C16	"Cytokines, Growth Factors Chemokines: Antibodies: and Mouse Monoclonal Antibody to Human TFG- $\beta$ (October 3, 2001) - RDI – Research Diagnostics, Inc. Website homepage – Thursday, February 7, 2002; Links for On Line Spec Sheets – <a href="http://www.researchd.com/cytokines/lgfbab.htm">http://www.researchd.com/cytokines/lgfbab.htm</a>	
	C17	Catalog No. M700022, Mouse Anti-Human TGF $\beta$ (2C5); Antigenix America, Inc.; <a href="http://www.SciQuest.com/cgi-bin/ncommerce3/ExecMacro/product_details.d2w/report?Tmstmp=1013101956096&amp;Refresh=N">http://www.SciQuest.com/cgi-bin/ncommerce3/ExecMacro/product_details.d2w/report?Tmstmp=1013101956096&amp;Refresh=N</a> , Thursday, February 7, 2002	
	C18	Catalog No. MO-C40009.D, Mouse Anti-Human TGF $\beta$ Monoclonal Antibody, Clone Number: 2C6; Anogen/Yes Biotech Laboratories Ltd.; <a href="http://www.SciQuest.com/cgi-bin/ncommerce3/ExecMacro/product_details.d2w/report?Tmstmp=1013102046067&amp;">http://www.SciQuest.com/cgi-bin/ncommerce3/ExecMacro/product_details.d2w/report?Tmstmp=1013102046067&amp;</a> ; Thursday, February 7, 2002	
	C19	Catalog No. MO-C40009.E, Mouse Anti-Human TGF $\beta$ Monoclonal Antibody, Clone Number: 2E6; Anogen/Yes Biotech Laboratories Ltd.; <a href="http://www.SciQuest.com/cgi-bin/ncommerce3/ExecMacro/product_details.d2w/report?Tmstmp=1013102046067&amp;">http://www.SciQuest.com/cgi-bin/ncommerce3/ExecMacro/product_details.d2w/report?Tmstmp=1013102046067&amp;</a> ; Thursday, February 7, 2002	
	C20	Catalog No. MO-C40009.F, Mouse Anti-Human TGF $\beta$ Monoclonal Antibody, Clone Number: 8C4; Anogen/Yes Biotech Laboratories Ltd.; <a href="http://www.SciQuest.com/cgi-bin/ncommerce3/ExecMacro/product_details.d2w/report?Tmstmp=1013102046067&amp;">http://www.SciQuest.com/cgi-bin/ncommerce3/ExecMacro/product_details.d2w/report?Tmstmp=1013102046067&amp;</a> ; Thursday, February 7, 2002	

<b>Examiner Signature</b>		<b>Date Considered</b>	
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<b>Sheet</b>	4	<b>of</b>	5	<b>Attorney Docket Number</b>	05569.0006.PCUS00

	C21	Catalog No. MO-C40009.H, Mouse Anti-Human TGF $\beta$ Monoclonal Antibody, Clone Number: 4C2; Anogen/Yes Biotech Laboratories Ltd.; <a href="http://www.SciQuest.com/cgi-bin/ncommerce3/ExecMacro/product_details.d2w/report?Tmstmp=1013102046067&amp;">http://www.SciQuest.com/cgi-bin/ncommerce3/ExecMacro/product_details.d2w/report?Tmstmp=1013102046067&amp;</a> ; Thursday, February 7, 2002	
	C22	Oncogene Research Products website – Catalog No. GF16 – Transforming Growth Factor $\beta$ 3 (Ab-1) Monoclonal Antibody, <a href="http://www.apoptosis.com/products/ProductDetail_ONC.asp?catNO=GF16">http://www.apoptosis.com/products/ProductDetail_ONC.asp?catNO=GF16</a> , February 7, 2002.	
	C23	ATCC, Welcome to the Monoclonal Connection (Hybridoma Data Bank) – What is the Hybridoma Data Bank (HDB), <a href="http://www/atcc.org/SearchCatalogs/hdb.cfm">http://www/atcc.org/SearchCatalogs/hdb.cfm</a> , pp. 1-2, February 7, 2002.	
	C24	ATCC Search “TGF $\beta$ ” Catalog No. 1024236 Re: 1 G>Homo sapiens 1, CN>human an 1024236 – <a href="http://phage.atcc.org/cgi-bin/searchengine/hdb/Longview.cgi?view=/pub/textfiles/hdb-di.out.17906760&amp;text=TGFb">http://phage.atcc.org/cgi-bin/searchengine/hdb/Longview.cgi?view=/pub/textfiles/hdb-di.out.17906760&amp;text=TGF<math>\beta</math></a> , February 7, 2002.	
	C25	ATCC Search “TGF $\beta$ ” Catalog No. 1024691 Re: 1 G>Homo sapiens 1, CN>human an 1024691 – <a href="http://phage.atcc.org/cgi-bin/searchengine/hdb/Longview.cgi?view=/pub/textfiles/hdb-di.out.17906760&amp;text=TGFb">http://phage.atcc.org/cgi-bin/searchengine/hdb/Longview.cgi?view=/pub/textfiles/hdb-di.out.17906760&amp;text=TGF<math>\beta</math></a> , February 7, 2002	
	C26	Abstract, Dasch, J. R., et al., “Monoclonal antibodies recognizing transforming growth factor-beta. Bioactivity neutralization and transforming growth factor beta 2 affinity purification,” <i>J. Immunol.</i> , 1989 Mar. 1:142(5):1536-41.	
	C27	Abstract, Lucas, C., et al., “The autocrine production of transforming growth factor-beta 1 during lymphocyte activation. A study with a monoclonal antibody-based ELISA,” <i>J. Immunol.</i> , 1990, Sep. 1:145(5):1415-22.	
	C28	Abstract, Wojtowicz-Praga, S., et al., “Modulation of B16 melanoma growth and metastasis by anti-transforming growth factor beta antibody and interleukin-2,” <i>J. Immunother. Emphasis Tumor Immunol.</i> , 1996 May; 19(3):169-75.	
	C29	Abstract, Hoefer, M., et al., “Anti-(transforming growth factor beta) antibodies with predefined specificity inhibit metastasis of highly tumorigenic human xenotransplants in nu/nu mice,” <i>Cancer Immunol. Immunother.</i> , 1995 Nov. 41(5):302-8.	

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